

AMPLIFICATEUR

AMPLIFICATEUR DE PUISSANCE

PORTEABLE

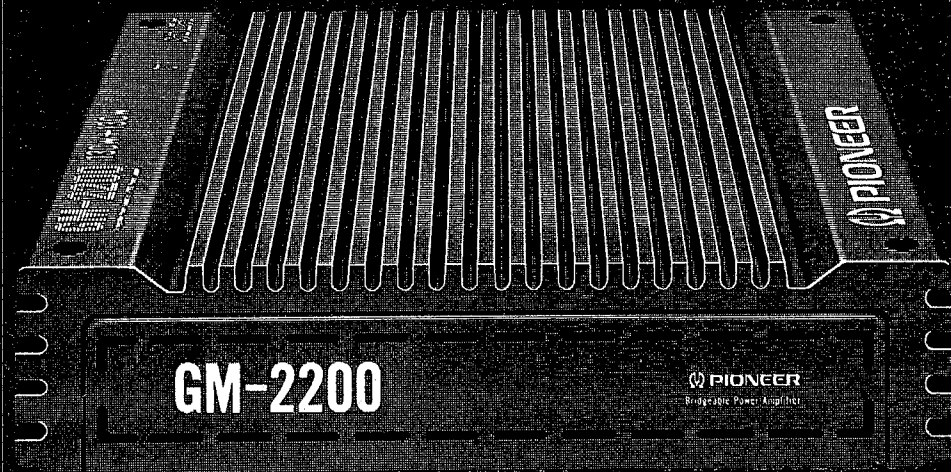
OWNER'S MANUAL MODE D'EMPLOI

Read this manual carefully before using the GM-2200. It contains important information for safe and proper use of the amplifier.

Read this manual carefully before using the GM-2200. It contains important information for safe and proper use of the amplifier.

Read this manual carefully before using the GM-2200. It contains important information for safe and proper use of the amplifier.

Read this manual carefully before using the GM-2200. It contains important information for safe and proper use of the amplifier.



PIONEER®
The Art of Entertainment

GM-2200

WARNING

Connection

- Remove the negative lead of the battery, otherwise there may be a short circuit, or the lead may be damaged.
- Use the supplied battery lead, as other leads may cause a fire.
- If the fuse in the battery lead needs to be replaced, use a fuse with the same rating. Do not use a piece of wire instead of the fuse, as it may cause a fire.

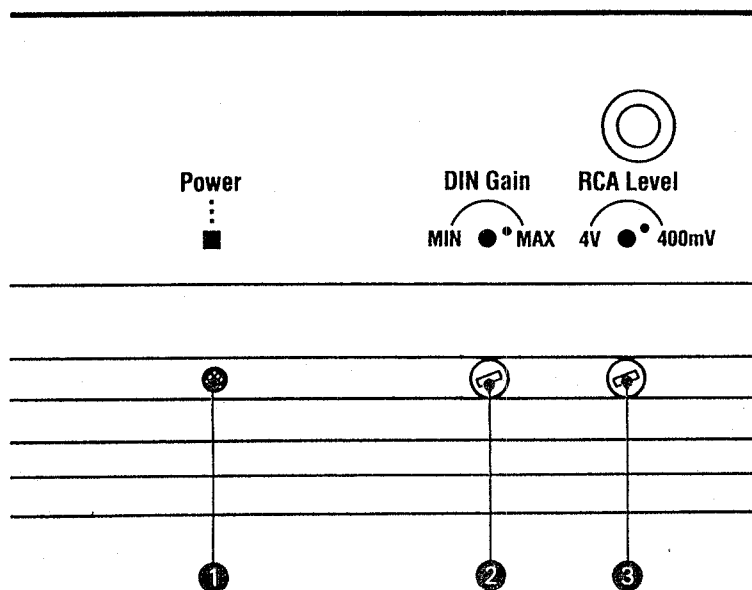
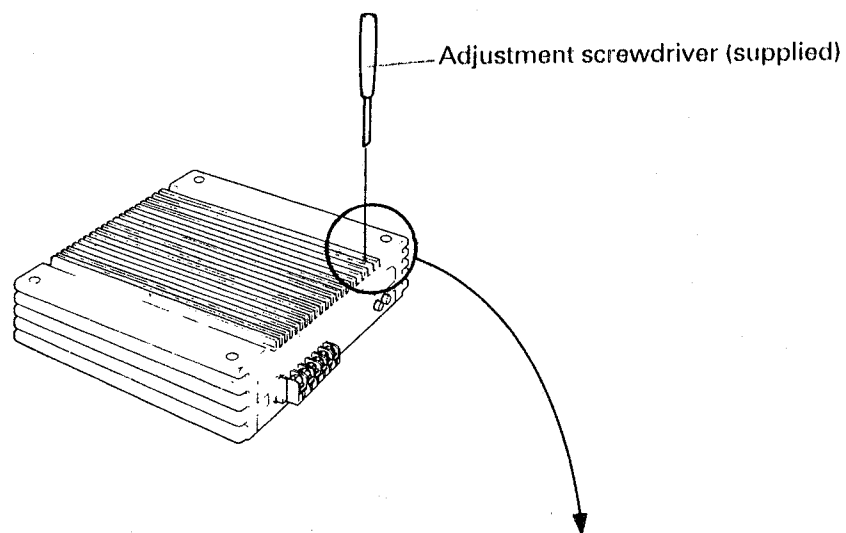
Installation

- If the amplifier is installed in the passenger compartment, fix it securely, otherwise it may break free while the car is moving, and cause an injury or an accident.
- Do not install the amplifier anywhere that can get wet, otherwise it may give an electric shock if touched.

Use

- When the amplifier is in use, its temperature reaches 80 degrees Celsius or higher. Do not touch it, otherwise you may be burned.

Controls and their Use



Power Indicator

The power indicator ① lights when the power is switched on.

DIN and RCA level controls

If the amplifier is connected to the DIN socket of a Pioneer car stereo component, turn the DIN input level control ② to the position marked •; the position of the RCA input level control ③ doesn't matter.

If the amplifier is connected to the RCA pin jacks of a Pioneer car stereo component, turn the DIN input level control ② fully clockwise (MAX), and turn the RCA input level control ③ to the position marked •.

If the amplifier is connected to the RCA pin jacks of a non-Pioneer car stereo component, turn the DIN input level control ② fully clockwise (MAX), and adjust the RCA input level control ③ to match the output of the component, using Fig. 1 as a guide.

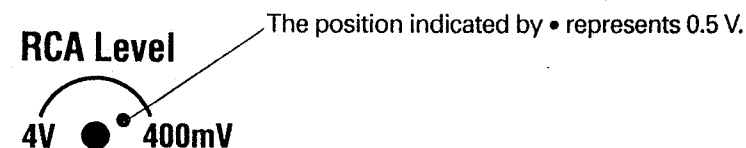
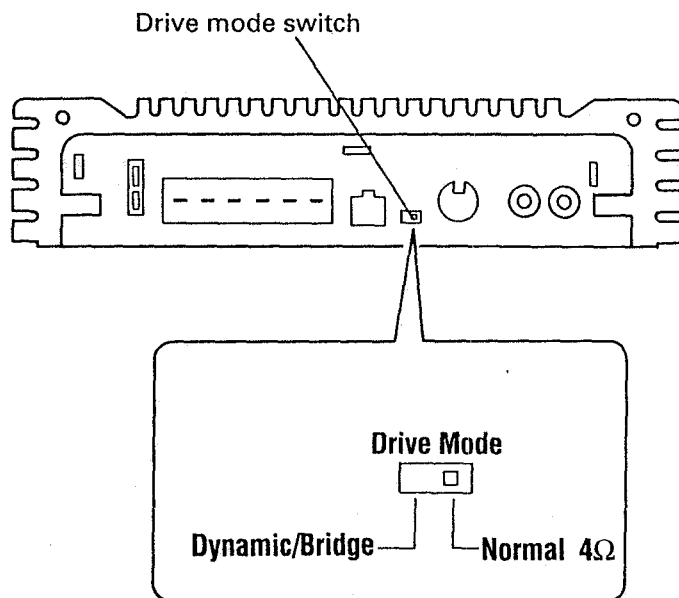


Fig. 1

- Adjust controls ② and ③ with the supplied adjustment screwdriver. Keep the screwdriver in case you need to readjust the controls later.

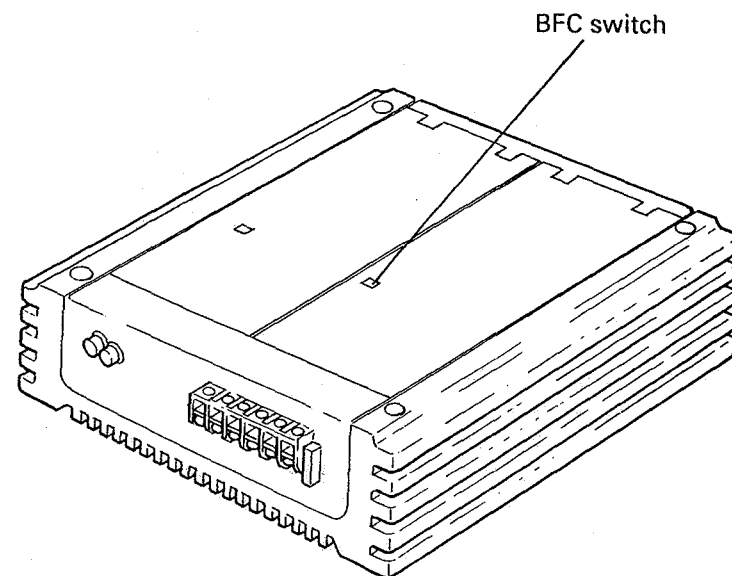
Drive mode switch

If the impedance of the speakers used with the amplifier is 4Ω or more, slide the drive mode switch on the rear of the amplifier to the right (Normal 4Ω). If one channel (mono) is used, or if the speaker impedance is 4Ω or less, slide the switch to the left (Dynamic/Bridge).



BFC (Beat Frequency Control) switch

If beating is heard when listening to AM stations on your car radio, change the position of the BFC switch on the bottom of the amplifier with a small flat-bladed screwdriver.



Connecting the Units

- Connect the components as shown in the diagram.
- Before finalizing installation, turn everything on, and make sure everything works correctly and that no noise is getting into the system.
 - When routing leads and cords, secure them with cable retainers and electrician's adhesive tape. Also, to prevent any damage to the insulation on the leads and cords, protect them with electrician's adhesive tape wherever they may touch sharp edges.
 - Keep all wiring away from hot surfaces or heater outlets to prevent short circuits.
 - It is recommended that the speakers connected to the amplifier have the ratings shown below, or higher. If a speaker has a rating below that recommended, it may be damaged when the volume is turned up. The speaker impedance must be 2 to 8 ohms.

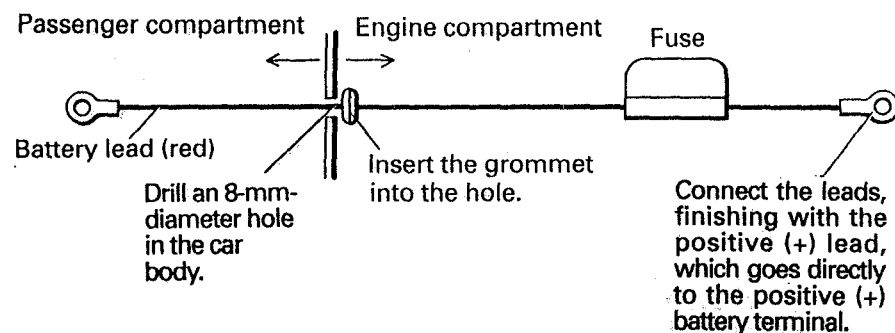
Mode	Speaker ratings		
		GM-2200	GM-1200
Two-channel	Maximum	100 W	50 W
	Nominal	50 W	25 W
One-channel	Maximum	320 W	160 W
	Nominal	160 W	80 W

In the case of a full-range speaker, use one whose maximum rating is higher than the maximum rating shown. In the case of a sub-woofer, use one whose nominal rating is higher than the nominal rating shown.

- Never connect a speaker lead to ground or to other speaker grounds. The protection circuitry will operate instantaneously, turning off the amplifier.
- To prevent noise problems, keep the power leads to the amplifier away from the signal cords and speaker leads. Also, keep the power leads away from any antenna cords.
- Amplifier ground leads (black) should be connected to a solid metal part of the vehicle body. If using multiple amplifiers, connect all amplifier ground leads to the same point to prevent noise problems. To get good contact when grounding, you may have to sand away the paint to expose the metal underneath.
- To operate the amplifier and car stereo properly, connect the battery lead and the accessory power lead (red) correctly. If the leads are not connected correctly or are not connected at all, the amplifier and car stereo will not work.
- To connect the amplifier to the RCA pin jacks of a car stereo component, use an audio cord with RCA pin plugs. To connect the amplifier to the DIN socket of a car stereo component, use a DIN connection cord. Both kinds of cord are available from your dealer.
- For detailed information on connections between different units and the amplifier, see the owner's manuals for the units, and follow their recommendations precisely.

Connecting the battery lead (red) (GM-2200)

Route the battery lead (red) from the engine compartment to the passenger compartment to connect it to the amplifier. To prevent a short circuit, do not connect the positive (+) lead of the battery until the other leads have been connected.

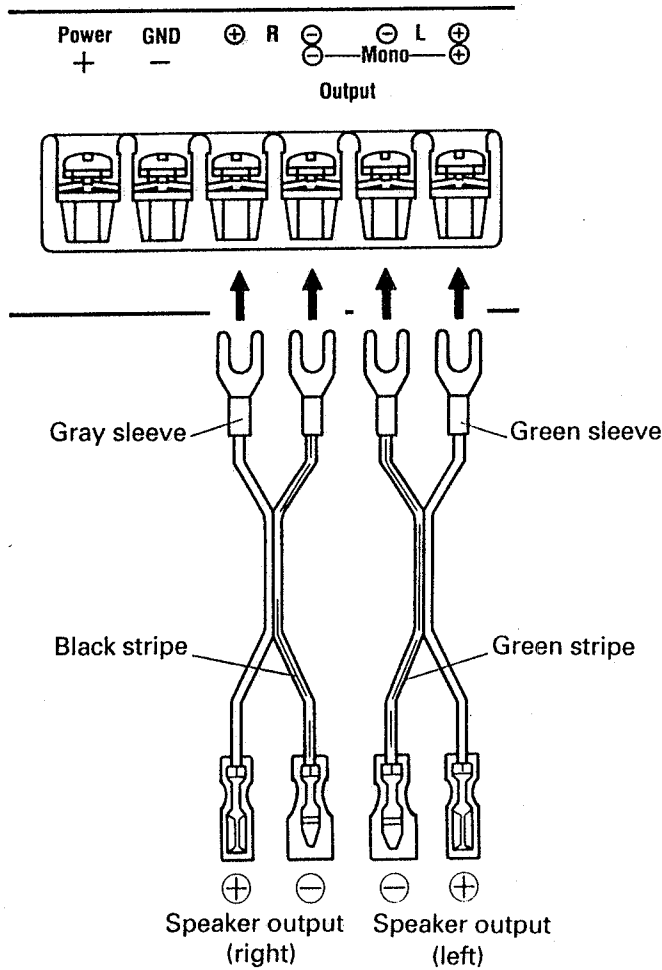


Connecting the leads (supplied)

Connecting the speaker leads

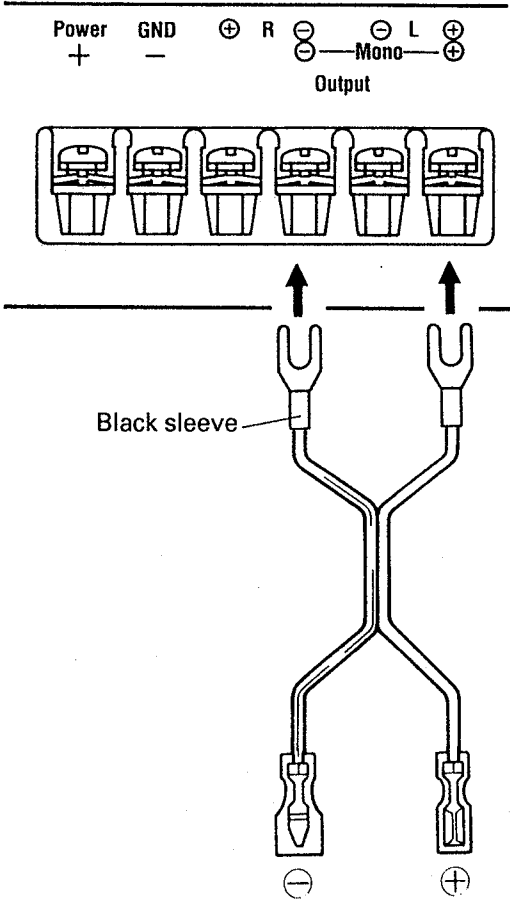
This amplifier can select two-channel output (stereo) or one-channel output (mono). The speaker leads must be connected to suit the mode selected. Connect the speaker leads to the output terminals of the amplifier, paying attention to the polarities (+ and -) and lead colors.

Two-channel mode (stereo)



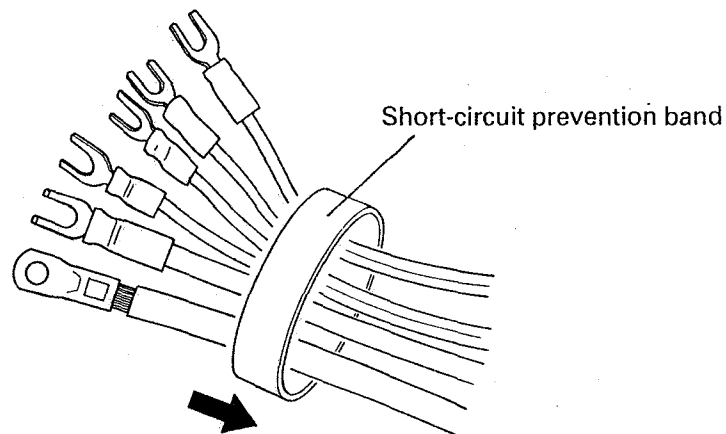
One-channel mode (mono)

- Slide the drive mode switch to the left (Dynamic/Bridge).

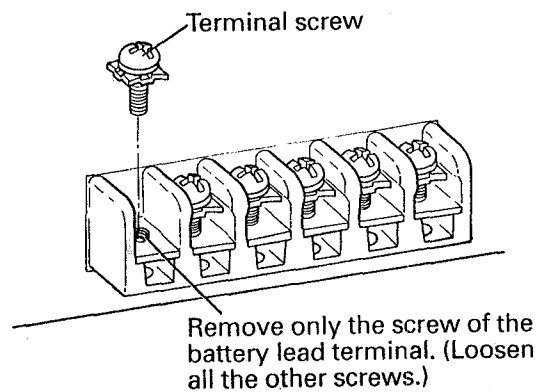


Connection procedure for speaker, battery, and ground leads

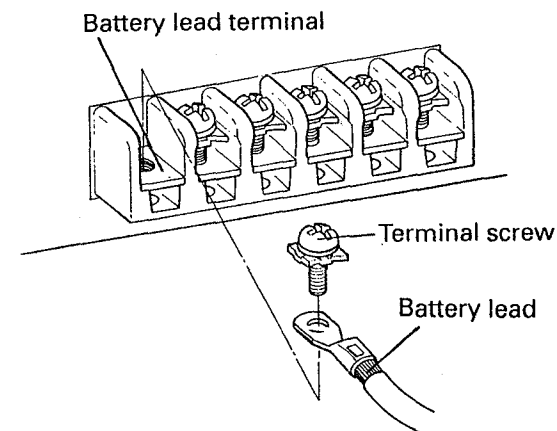
1. Pass the leads through the band for preventing short circuits.
 - This band *must* be used.



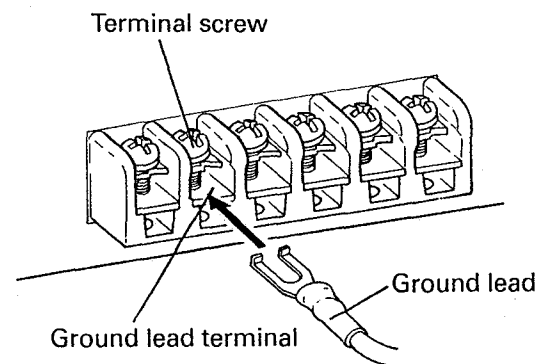
2. Loosen the screws of the terminals on the rear panel, and remove the screw of the battery lead terminal.



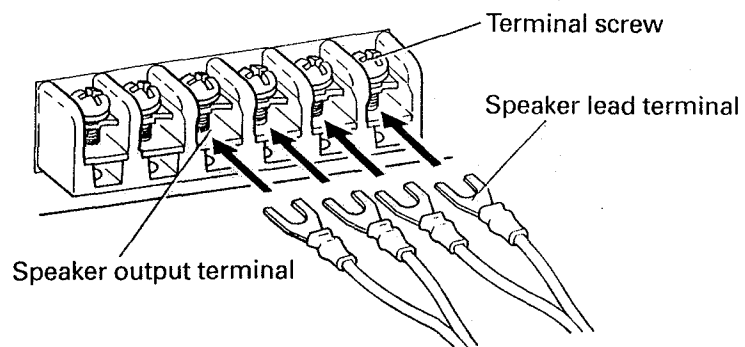
3. Connect the battery lead to the battery lead terminal, reinserting and tightening the screw.



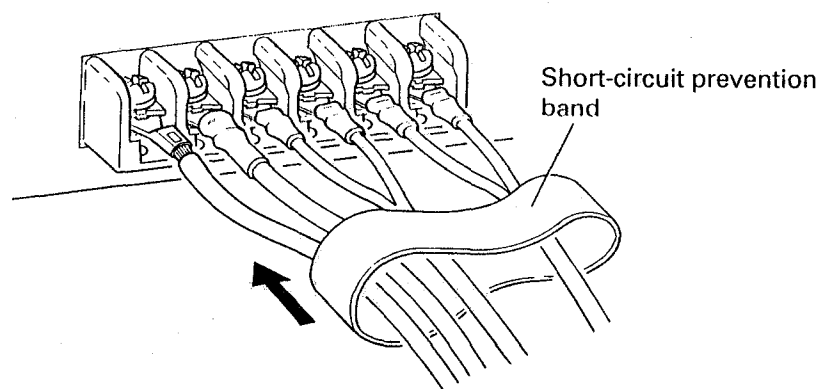
4. Connect the ground lead to the ground lead terminal, tightening the screw.



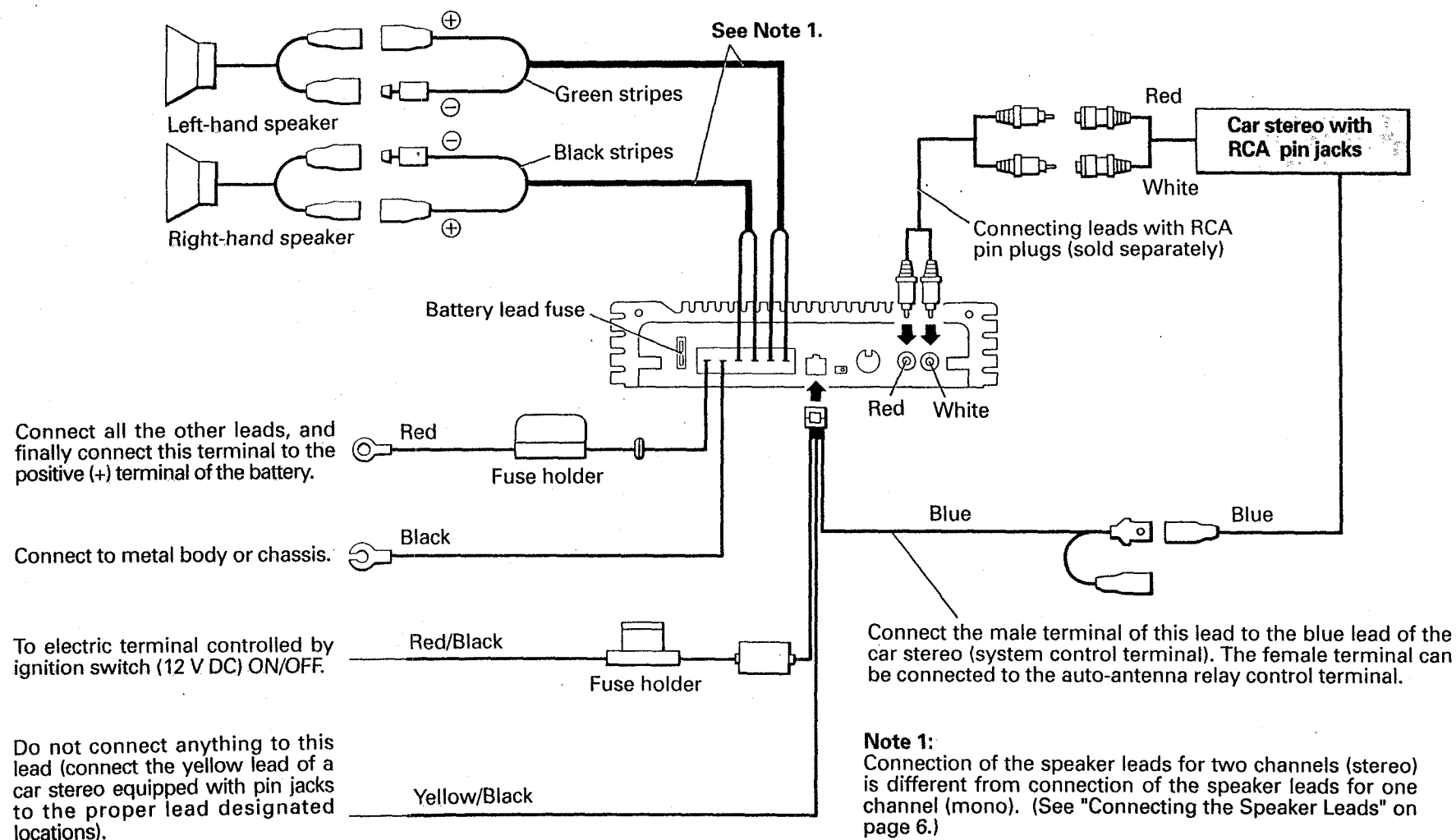
5. Arrange the speaker leads to suit the output mode to be used, connecting them to the speaker output terminals, and tightening the screws.



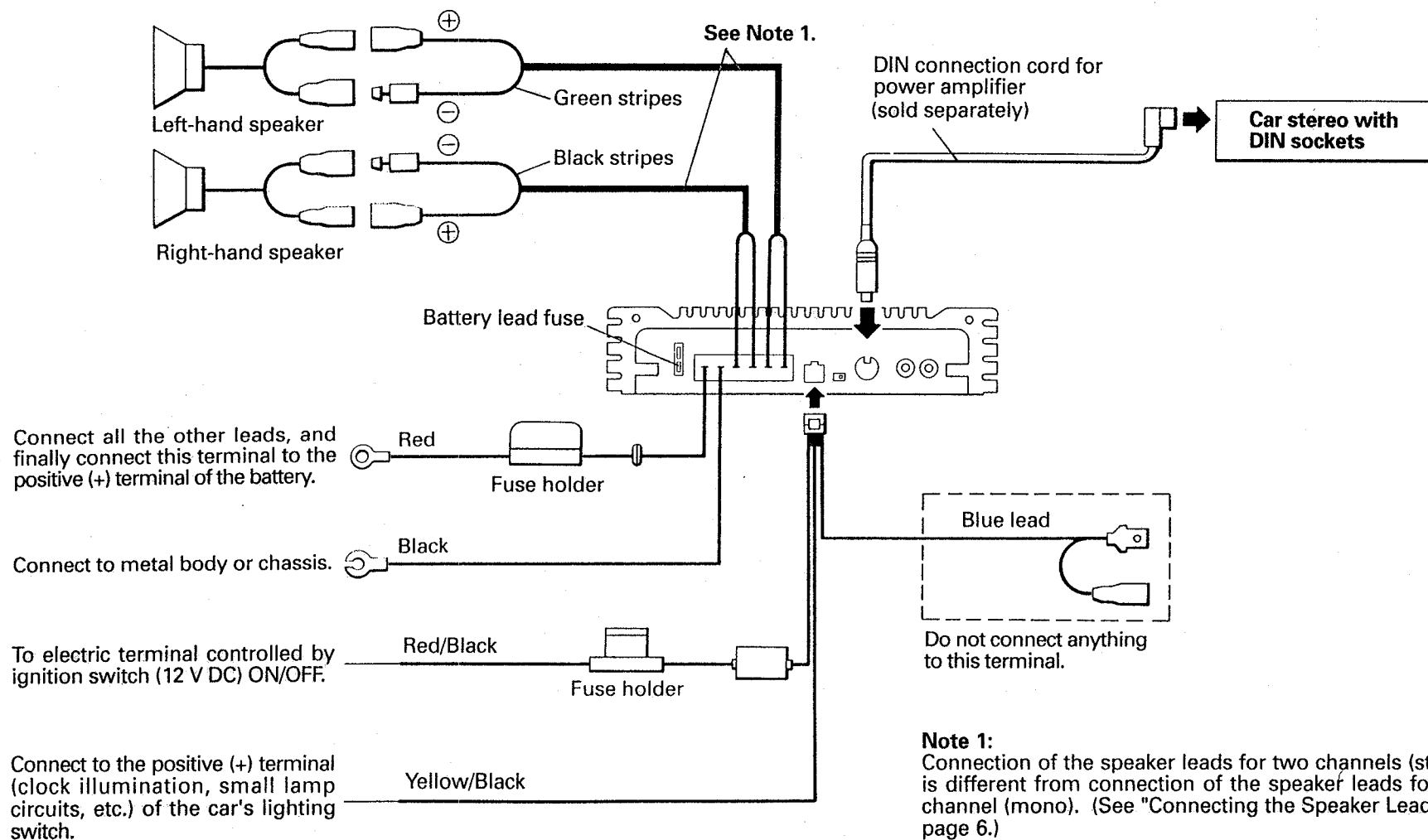
6. Slide the short-circuit prevention band over the terminals.



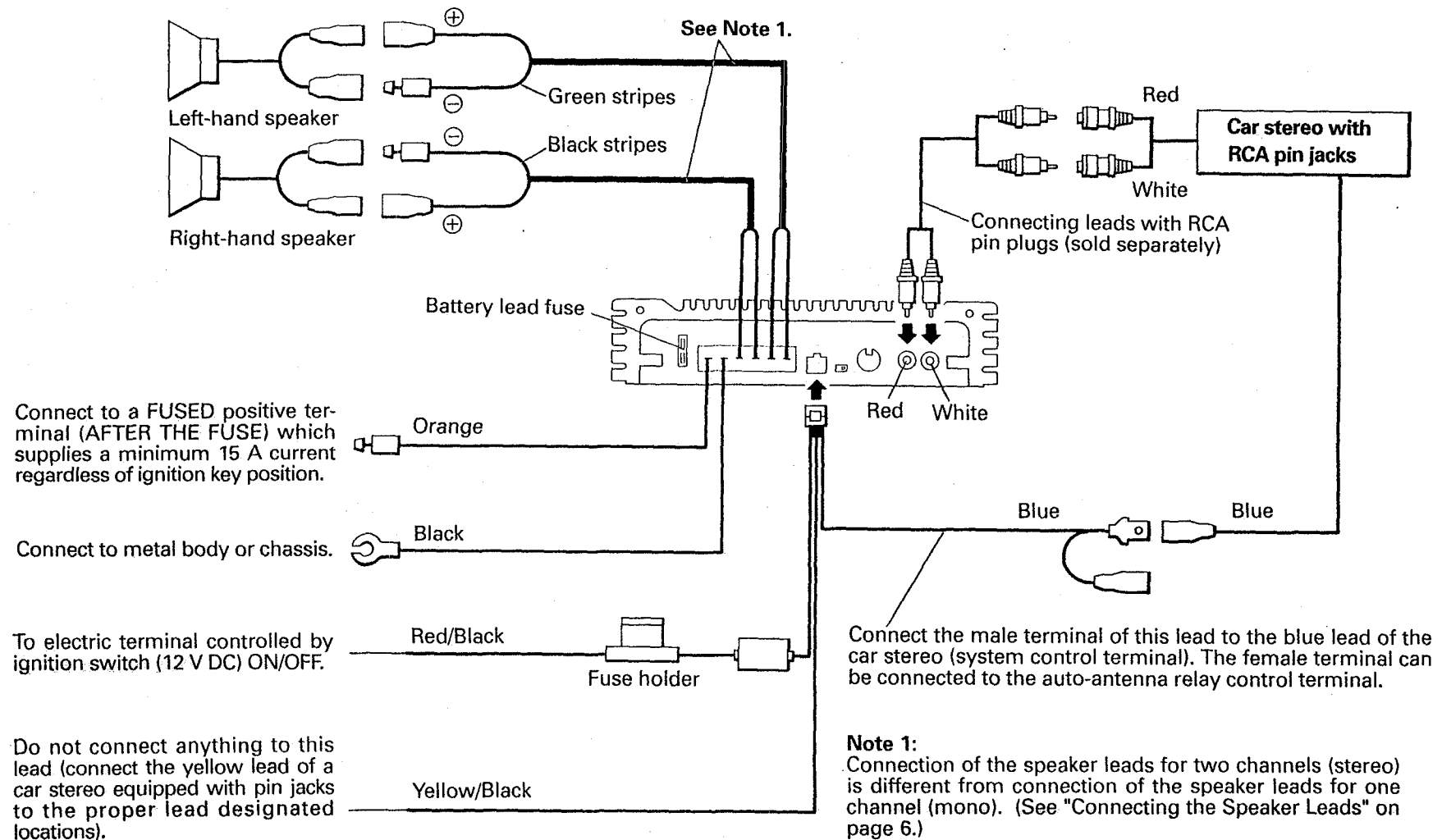
When Combined with a Car Stereo with RCA Pin Jacks (GM-2200)



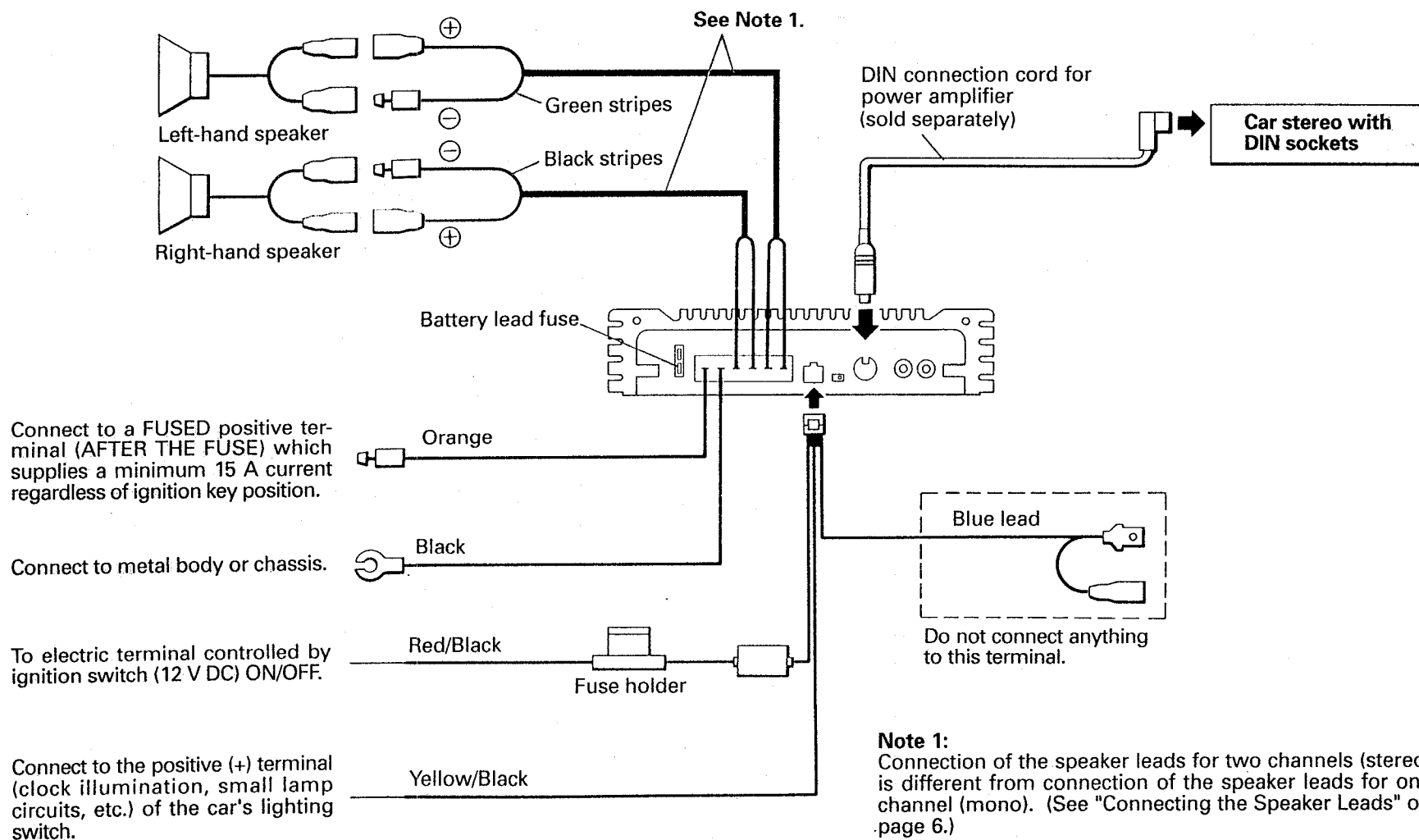
When Combined with a Car Stereo with DIN Sockets (GM-2200)



When Combined with a Car Stereo with RCA Pin Jacks (GM-1200)

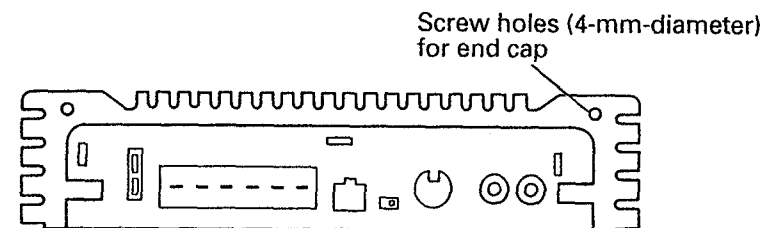


When Combined with a Car Stereo with DIN Sockets (GM-1200)

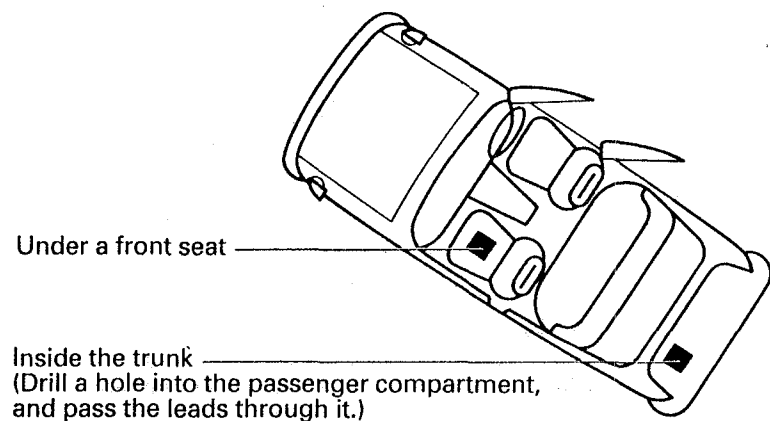


Installation

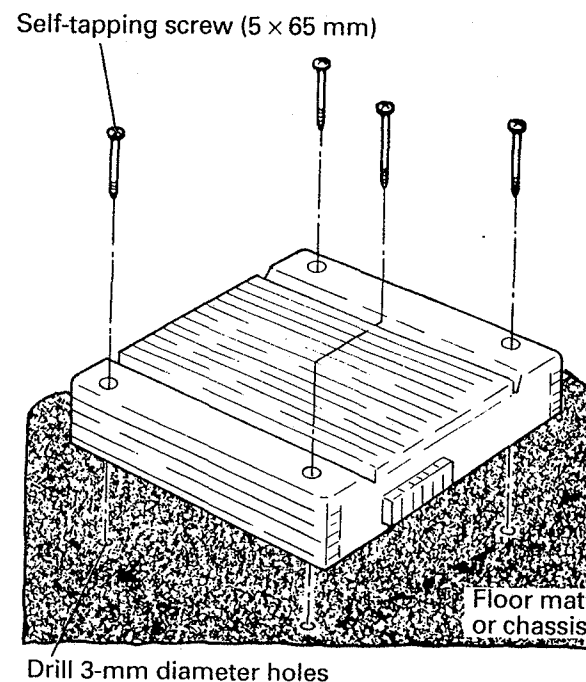
- Install the amplifier where it will not get in the way of driving, and will not be a danger to passengers during an emergency stop.
- If the amplifier is installed in the passenger compartment, fix it securely, otherwise it may break free while the car is moving, and cause an injury or an accident.
- Do not install the amplifier anywhere that can get wet, otherwise it may give an electric shock if touched.
- To prevent a short circuit, disconnect the negative battery lead before beginning installation. After installation has been completed and checked, reinstall any components that were moved or removed, then reconnect the lead to the negative battery terminal.
- Before drilling any mounting holes, check behind where you want to make the hole to make sure you do not drill into anything, such as the gas line, brake lines, electrical wiring, etc.
- If installed under a front seat, make sure the amplifier does not obstruct seat movement. Route all leads and cords carefully so the sliding seat mechanism does not pinch them and cause a short circuit.
- Do not install the amplifier under the carpet or a floor mat, as this will impede air circulation, causing the amplifier to overheat and possibly fail.
- Do not install the amplifier near the heater outlet, otherwise it may overheat and fail.
- Use only the parts supplied, and install the amplifier securely. If parts other than those supplied (specified) are used, they may come loose or cause damage to internal parts of the amplifier.
- Consult your dealer before making any holes in the car.
- If mounting the amplifier vertically, buy some 5-mm-diameter screws and nuts, and use them to secure the amplifier firmly, so that it cannot be dislodged by the vibration of the car.
- There are 4-mm-diameter screw holes on the right and left at the rear of the amplifier. These are used to fit an optional amplifier installation end cap. Do not use them for anything else.



Example of Installation Positions



1. Put the amplifier where it is to be installed, insert the supplied self-tapping screws (5 × 65 mm) into the screw holes, and push on them with a screwdriver so they make marks where the installation holes are to go.
2. Drill 3-mm-diameter holes at the points marked, and install the amplifier, either on the floor mat or directly on the chassis.



Care and Maintenance

- When replacing the fuse, replace it with one with the correct rating. If the correct fuse is not used, the amplifier may be damaged or there may be a fire.
- Do not use the amplifier at high volume for a long time with the engine stopped or idling. It may make the battery go flat, making it difficult to start your engine.
- The protection circuitry will operate instantaneously if a malfunction occurs, turning off the amplifier. If this happens, disconnect the power to the car stereo system, check the wiring for the cause of the problem, and, if found, correct it before using the stereo system again.
- Do not turn the volume up so high that you cannot hear police car, ambulance, or fire engine sirens.

In Case of Problems

If the amplifier will not operate properly, contact your dealer or nearest authorized Pioneer service station.

Specifications

Power source	14.4 V DC (10.8 - 15.6 V allowable)
Grounding system	Negative type
Current consumption	
(GM-2200)	13 A (at continuous power, 4Ω)
(GM-1200)	6.5 A (at continuous power, 4Ω)
Fuse	
(GM-2200)	30 A
(GM-1200)	15 A
Dimensions	
(GM-2200)	264 (W) × 58 (H) × 260 (D) mm
(GM-1200)	264 (W) × 52 (H) × 180 (D) mm
Weight	
(GM-2200)	4.3 kg (Leads for wiring not included)
(GM-1200)	2.9 kg (Leads for wiring not included)
Maximum power output	
(GM-2200)	130 W × 2/320 W × 1 (EIAJ)
(GM-1200)	70 W × 2/160 W × 1 (EIAJ)
Continuous power output	
(GM-2200)	65 W × 2/160 W × 1 (at 4Ω, 20 - 20,000 Hz, 0.05% THD)
	80 W × 2 (at 2Ω, 20 - 20,000 Hz, 0.05% THD)
(GM-1200)	35 W × 2/80 W × 1 (at 4Ω, 20 - 20,000 Hz, 0.05% THD)
	40 W × 2 (at 2Ω, 20 - 20,000 Hz, 0.05% THD)
Load impedance	4Ω (2 - 8Ω allowable)
Frequency response	10 - 50,000 Hz (+0 dB, -1 dB)
Signal-to-noise ratio	
(GM-2200)	103 dB (IEC - A network)
(GM-1200)	102 dB (IEC - A network)
Distortion	
(GM-2200)	0.003% (at 20 W, 1 kHz)
(GM-1200)	0.003% (at 10 W, 1 kHz)
Separation	65 dB (1 kHz)
Input level	RCA: 0.4 - 4 V / 8 kΩ
	DIN: 70 - 500mV / 22 kΩ

Note:

Specifications and the design are subject to possible modification without notice due to improvements.